



DEPARTMENT OF THE NAVY
Headquarters, United States Marine Corps
Washington, DC 20380-1775

NORMAL

MI 09665B-12/1

U.S. MARINE CORPS MODIFICATION INSTRUCTION

INSTALLATION OF CRAFT MODIFICATION KIT ON THE
COMBAT RUBBER RECONNAISSANCE CRAFT

- Purpose.** To provide instructions for installing Craft Modification Kit (CMK) to upgrade transom and install fuel line hold down clamps on Combat Rubber Reconnaissance Craft (CRRC).
- Time Compliance Period.** This modification must be applied before the Small Craft Propulsion System (SCPS) can be mounted and the craft declared operational. This MI shall be applied within one year of receipt.
- Information.** Existing transoms on both the F470SW skin (PN 03012) and F470 skin (PN 0352) have to be modified in order to mount new SCPS.
- Technical Manuals Affected.** TM 09665B-13/1 Operations and Maintenance Instructions with Components and Repair Parts Listings for the Combat Rubber Reconnaissance Craft.

5. Major Items Affected

<u>Description</u>	<u>NSN</u>	<u>TAM No.</u>	<u>I.D. No.</u>
Combat Rubber Reconnaissance Craft	1940-01-450-8597	C5901	09665B

6. Components Affected

<u>Description</u>	<u>NSN</u>	<u>PN</u>
Transom (F470 SW)	N/A	3819 (60042)
Transom (F470)	5340-01-363-2845	6873
Aluminum Floorboard Kit	2510-01-422-0410	3883

7. Materiel Affected

a. Materiel Required

<u>Item</u>	<u>Description</u>	<u>NSN</u>	<u>PN</u>	<u>Qty.</u>
	Kit, Transom Cap Modification c/o:	1940-09-000-0007	55B19000	1
(1)	Transom Cap		55B19000-2 (9N201)	1
(2)	Washer, Flat 3/4 inch		55B19004 (9N201)	2
(3)	Nut, Locking 3/4 inch		55B19005 (9N201)	2
(4)	Bolt, 5/16-18 X2 1/4 inch		55B19007 (9N201)	4
(5)	Washer, Flat 5/16 inch		55B19008 (9N201)	8
(6)	Nut, Locking 5/16-18		55B19009 (9N201)	4
(7)	Eyebolt, 3/4 inch		55B19003 (9N201)	2
(8)	Kit, Fuel Line Hold Down		55B19020 (9N201)	1
(9)	Pins, Quick Release		55B19002-1 (9N201)	2
(10)	Bolt, Shouldered, 5/16 inch		55B19002-2 (9N201)	1

b. Materiel Discarded. Dispose of discarded materiel in accordance with current Marine Corps directives.

<u>Description</u>	<u>NSN</u>	<u>PN</u>	<u>Qty</u>
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Transom Cap (F470)	5340-01-366-0789	6896424	1
Clevis Pin		92390A389 (39428)	4
Turn Buckle	5340-01-366-6987	6896430	2
Eyebolt, Floor	5305-01-366-0657	6896439	2

10. Skill and Time Required. One Small Craft Mechanic (MOS 1342) 3.5 hours.

11. Modification.

a. Disassembly (F470SW) of transom.

- (1) Insure craft is properly inflated per TM 09665B-10/1.
- (2) Remove wooden transom sacrificial plate.
- (3) Remove serial number plate and brads from sacrificial plate and retain.
- (4) Remove two (2) nylon transom straps.
- (5) Remove engine-mounting plate.
- (6) Fill all existing holes with RTV to eliminate leaks and wood rot.

b. Disassembly (F470) of transom.

- (1) Insure craft is properly inflated per TM 09665B-10/1.
- (2) Remove clevis pins and turn buckles between transom and floor plate.
- (3) Remove eyebolts from transom.
- (4) Remove bolts securing transom cap to transom.
- (5) Remove and retain transom filler piece from inside transom cap.
- (6) Remove eyebolts in rear floor plate.
- (7) Remove two large washer assemblies.
- (8) Fill all holes with RTV to eliminate leaks and wood rot.

c. Assembly of new Transom Cap.

- (1) For F470 Only – Replace transom filler piece and secure with wood screws.

(2) Place new transom cap (1) from CMK on transom with engine guides facing outside and textured plate inside.

(3) Center transom cap on transom using center hole of engine mounting plate as a reference point. Once centered, use clamps to secure in place.

(4) Find and mark center of each hole (pre-drilled in transom cap) on transom.

(5) Using 13/16 and 11/32 inch drill bits, drill appropriate holes through transom. (i.e. 13/16 bit for eyebolts and 11/32 for lower transom bolts and Quick Release Pins).

(6) Remove clamps and transom cap. Clean all wood shavings from the holes and floor of the craft.

(7) Using flat black paint, paint inside of all newly drilled holes.

(8) Replace transom cap, aligning holes, and install hardware (2,3,4,5,6, and 7) loosely.

(9) Place a bead of RTV around the shank of the bolts between washers and transom. Torque bolts 10-12 ft lbs. and eyebolts 15-20 ft lbs.

(10) Remove excess RTV from mounting bolts.

(11) Reposition serial number plate below transom cap and centered on the inside of transom and install with brads retained in step 11.a.(3) above.

d. Installation of Fuel Line Hold Down Clamps.

(1) Install clamps (8) by sliding into existing port side accessory track on aluminum floorboards. Be sure shortest clamp is installed on rear floorboard.

(2) Lift clamps and slide fuel line under to secure.

13. Recording the Instruction. Ensure that appropriate records are updated in accordance with current edition of TM 4700-15/1 or as set forth in this instruction.

